



Image

1765

Attorney's Docket No.: 10559-762001
Intel Docket No.: P12905

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Salish C. Suthar, et al. Art Unit : 1765
Serial No. : 10/076,130 Examiner : Duy Vu Nguyen Deo
Filed : February 13, 2002 Assignee : Intel Corporation
Title : FOCUSED ION BEAM VISUAL ENDPOINTING

Mailstop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

In response to the Restriction Requirement dated March 2, 2004, Applicants hereby elect the invention of Group I, which includes claims 1 to 24. The election is made with traverse for at least the following reasons.

According to 35 U.S.C. §121, "[i]f two or more *independent* and *distinct* inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions" (emphasis added). MPEP §803 states that restriction is proper if the inventions are independent or distinct, and there is a serious burden on the Examiner to search both inventions.

According to MPEP §802.01,

[t]he term "independent" (i.e., not dependent) means that there is no disclosed relationship between the two or more subjects disclosed, that is, they are unconnected in design, operation, or effect, for example: (1) species under a genus which species are not usable together as disclosed; or (2) process and apparatus incapable of being used in practicing the process.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: 4/2/04
Signature: [Signature]
Typed or Printed Name of Person Signing Certificate: Tu Gorkman

Applicants submit that the claims of Groups I and II are not independent. More specifically, independent claim 1 of Group I reads as follows:

1. A method for use in removing a portion of a semiconductor chip having a frontside and a backside, the method comprising:
etching the backside of the semiconductor chip, the frontside including a first well with a first type of doping and a second well with a second type of doping;
monitoring the backside of the semiconductor chip during etching; and
determining when a first portion of the backside over one of the first and second wells differs from a second portion of the backside over the other of the first and second wells.

Independent claim 25 of Group II reads as follows:

25. An article comprising a machine-readable medium that stores machine-executable instructions for detecting an endpoint of an etch, the instructions causing a machine to:
etch the backside of the semiconductor chip, the frontside including a first well with a first type of doping and a second well with a second type of doping;
monitor the backside of the semiconductor chip during etching; and
determine when a first portion of the backside over one of the first and second wells differs from a second portion of the backside over the other of the first and second wells.

As shown above, independent claims 1 and 25 includes virtually identical etching, monitoring and determining functions. In view of the similar content of claims 1 and 25, Applicants submit that it is not correct that there is no disclosed relationship between the Groups I and II claims; that is, they are connected in design, operation, or effect. As such, Applicants submit that the Groups I and II claims are not independent.

Applicant further submits that the inventions in the Groups I and II claims are not distinct. According to MPEP §802.01,

[t]he term "distinct" means that two or more subjects as disclosed are related, for example, as combination and part (subcombination) thereof, process and apparatus for its practice, process and product made, etc., but are capable of separate manufacture, use, or sale as claimed, and are patentable (novel and unobvious) over each other (though they may each be unpatentable because of the prior art).

In this regard, it was said on page 2 of the Office Action that the Groups I and II claims are distinct because the apparatus of the Group II claims "can be used to practiced [*sic*, practice] another and materially different process such as storing instructions for a deposition process". Applicants respectfully disagree with this contention.

More specifically, the apparatus of claim 25 includes instructions that cause a machine to "etch the backside of the semiconductor chip, the frontside including a first well with a first type of doping and a second well with a second type of doping; monitor the backside of the semiconductor chip during etching; and determine when a first portion of the backside over one of the first and second wells differs from a second portion of the backside over the other of the first and second wells". This is precisely the method claimed in claim 1. As such, Applicants submit that it is wrong to state that the apparatus of the Group II claims can be used to practice another and materially different process that the method of the Group I claims.

Furthermore, since apparatus claim 25 contains instructions that, when executed, essentially perform the process of method claim 1, Applicants are unsure as to how the Examiner could conclude that the claims of Group I (in their current form) are patentable over the claims of Group II (in their current form), and vice versa.¹ Since distinctness according to the MPEP requires both sets of claims to be separately usable and patentable "over each other", and since this does not appear to be the case for the claims of Groups I and II in their current form, Applicants submit that the Groups I and II claims are not distinct.

In view of the foregoing remarks, Applicants submit that the Groups I and II claims are not independent or distinct and, therefore, restriction is improper. Moreover, since the Group II

¹ Applicants note that amendments made to the claims of Groups I and II may more clearly patentably distinguish those sets of claims from one another.

Applicants : Salish C. Suthar, et al.
Serial No. : 10/076,130
Filed : February 13, 2002
Page : 4 of 4

Attorney's Docket No.: 10559-762001
Intel Docket No.: P12905

claims contain substantially all of the features of the Group I claims, Applicants further submit that it would not be a serious burden on the Examiner to search both sets of claims. Accordingly, withdrawal of the restriction requirement is respectfully requested.

No fee is believed to be due for this Response; however, if any fees or credits are due, please apply or credit such fees to Deposit Account No. 06-1050.

Respectfully submitted,

Date: April 2, 2004



Paul A. Pysher
Attorney for Intel Corporation
Reg. No. 40,780

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906